

**WORKPLAN****I. Project Title and Project Purpose Statement****Title: Community Collaboration for a Resilient West End**

**Summary:** Groundwork Providence (GWP) will convene community partners in the West End neighborhood of Providence, Rhode Island in order to address the pressing and urgent issue of climate change resiliency and its relation to the local economy. The West End features strong community-based organizations with many resident engagement efforts underway, as well as unique vulnerabilities to the current and future impacts of climate change, particularly urban heat island effect and flooding. GWP runs a landscaping social venture, GroundCorp, that hires unemployed residents and graduates of our environmental job training program who face barriers to employment. We see a strong role for GroundCorp in creating visible, effective solutions to these climate change impacts, where employees can work directly in their community to effect change and improve the community context. Organizations working in this neighborhood have also already participated in community engagement efforts led by the Environment Council of Rhode Island (ECRI) to better understand how low-income communities of color in Rhode Island's urban areas are both vulnerable to climate change impacts and can lead the way in identifying strategies that will create greater resiliency. Our project will build on these efforts (which were modest and supported by very little funding), leverage recent developments on the state and local level that are beginning to address stormwater runoff as well as climate mitigation and adaptation, and, lastly, draw on Providence's most distinctive assets – its creative, artistic culture and its compact size, which has fostered a collaborative spirit among the city's many community organizations. Specifically, our project will:

- Work with a diverse range of community, academic, and government partners to engage and activate community residents in Providence's West End neighborhood to create a shared understanding of climate change resiliency and potential impacts, and proactively develop solutions;
- Leverage current initiatives and existing assets related to climate change and green infrastructure to model effective on-the-ground resiliency strategies in an urban environmental justice community context;
- Provide pathways for job training graduates to develop and hone skills in stormwater management and restorative urban landscaping, and establish GWP, via our landscaping social venture, GroundCorp, as the go-to community-based choice for small to mid size green infrastructure installations, as well as a source of high quality locally-grown trees via our Hope Tree Nursery.

**Location:** This project will take place in the West End neighborhood (zip codes 02907 and 02909) in Providence, Rhode Island (RI).

**Related Environmental Statutes:** Our project addresses two qualified federal environmental statutes: 1) Clean Water Act 104(b)(3), and 2) Clean Air Act Section 103(b)(3). Through a community action team, our project will address current and future climate change impacts including high heat days and poor air quality in an asthma hot spot in the city, as well as flooding, which exacerbates existing problems with Providence's stormwater management system and overall surface and ground water quality. Our team will engage in demonstration projects, tree plantings, and community-led surveys and assessment to identify priority vulnerable areas in each neighborhood, and work together to develop and implement solutions that improve water quality and protect people's health and well-being. Our project also supports the EPA's Strategic Plan Goal 3: "Cleaning Up Communities and Advancing Sustainable Development" through its focus on green infrastructure and connections with the City of Providence's Sustainability Action Plan and Comprehensive Plan; and EPA's additional cross-agency strategy of "Making a Visible Difference in Communities Across the Country" with our goal to add green space to our focus neighborhoods as sustainable stormwater controls and beautifying features.

**Community Climate Resiliency Focus:** Our project's focus is community climate resiliency, building on efforts that have already taken place in the neighborhood, as well as strategically using Groundwork's strong relationship with the West Elmwood Housing Development Corporation (WEHDC) and other partners to engage West End residents on this topic.

**II. Environmental and Public Health Information About the Affected Community**

**Local Environmental and Public Health Issues this Project Seeks to Address:** Degraded air quality, urban heat island effect, degraded water quality, and flooding will exacerbate current environmental and public health conditions in RI's urban communities unless programs and policies are put into place to foster greater resiliency and protect the most vulnerable residents. Providence's long industrial history has led to an urban landscape dominated by impervious surfaces and low tree cover, which exacerbate two of the primary environmental and health-related impacts of climate change: high heat days and major storm

events. In addition, we see a crucial need to connect climate change impacts directly with the economic security of Providence residents, which will help build resiliency for individual residents and the community as a whole. **Heat Islands, Air Quality, and High Heat Days:** Providence is RI's largest heat island, exacerbated by poor tree coverage and extensive impervious cover (59% of total land area<sup>1</sup>). The EPA defines heat islands as built-up areas that are hotter than nearby rural areas; stating that annual mean air temperature of a city with 1 million people or more can be 1.8–5.4°F warmer than its surroundings. A 2010 study by Brown University found an approximately 10° F range in temperature between sites in Providence, with temperatures generally corresponding with the amount of tree coverage. Heat islands can affect communities by increasing air pollution and greenhouse gas emissions, causing heat-related illness and mortality, and damaging water quality. The focus neighborhood for our project, the West End, has extremely limited tree coverage at 15.4% compared to affluent neighborhoods like College Hill (30%) and Blackstone (40.1%)<sup>2</sup>. This situation makes hot days hotter with few cool places to retreat to. Particularly at risk are elderly people, children, and people with asthma or other respiratory illnesses, especially those living in poverty, with other underlying medical conditions or limited access to health care. The West End experiences high heat days and is considered a major asthma hot spot by HEALTH (based on insurance claims data broken down by zip code). Rising ozone levels, a byproduct of air pollution, and often associated with hotter temperatures, have been tied to asthma and other respiratory problems as well. The West End is bordered by major bus routes and an Amtrak/MBTA Commuter Rail train line, contributing to its overall air pollution load. The Climate and Health program at HEALTH is currently collecting and studying data that highlights the impact of heat on hospital admissions in RI. Vulnerable neighborhoods, including the West End, have been identified and the research emphasizes the importance of implementing resiliency strategies as a safeguard against major heat and flooding events. **Major Storm Events, Water Pollution, and Flooding:** As a coastal state, RI will experience an increased frequency of storm events and Nor'easters due to climate change, and Providence, sitting at the head of Narragansett Bay, is particularly vulnerable. In March 2010, we saw a dramatic example of this issue, when a severe storm flooded many parts of the state particularly urban areas. Efforts to address water pollution and flooding from stormwater in Providence are well underway, and our project will build on these efforts. GWP's current staff have led stormwater education and demonstration projects in Reservoir Triangle, a neighborhood adjacent to the West End for many years already. The City of Providence is pursuing discussions with 6 other RI municipalities about the creation of a regional stormwater utility in order to generate the resources necessary to bring the cities into compliance with the Clean Water Act. Green infrastructure and neighborhood-based demonstration projects exemplify the type of solutions that would be supported by a future stormwater utility, and are a priority focus for GWP. Additionally, in 2015, Providence will begin its participation in the Trust for Public Land's Climate Smart Cities program, which is collaborating with the City of Providence to create an online GIS mapping tool that overlays heat islands, flooding zones, low-income areas, and other attributes in order to pinpoint priority sites where Providence can realize multiple climate resiliency benefits. Our project will support these efforts by basing this data collection and dissemination in a community context, ensuring that residents are involved in the process of deciding where green infrastructure, trees, and other resiliency features should be placed, and how they will be supported and maintained over time. **Results Achieved from Related Efforts:** GWP has a strong track record working in the West End with our main partner, the West Elmwood Housing Development Corporation (WEHDC). We currently run a 290 pot-in-pot tree nursery on land owned by WEHDC, perform routine cleanup of neighborhood vacant lots, build community gardens, and conduct other landscaping work all through GroundCorp. The tree nursery was developed on a remediated brownfield and grows both native and diverse trees that perform well in RI's urban environment. We sell the trees both for profit and at-cost to public and private entities in low-tree cover areas of the city (for this project we will not charge the city, residents, or participating businesses for trees we plant as part of our efforts). WEHDC coordinates the West End Community Action Team (WECAN) partnership with other neighborhood organizations such as the African Alliance of RI, Friends of Bucklin Park, its own resident action council, GWP, and others to identify and solve community issues identified by residents. Previously, WEHDC, African Alliance, and Friends of Bucklin Park all participated in community tree plantings and information sessions related to climate change resiliency, efforts led by the Environment Council of RI with

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<sup>1</sup> According to RI Department of Environmental Management (DEM)

<sup>2</sup> "Trees and the Urban Heat Island Effect", Brown University Center for Environmental Studies, Spring 2010.

involvement from GWP's current Executive Director (E.D.). Our project will build on all of these past efforts and involve residents in even greater visible change in the neighborhood that protects their health and quality of life. **Characteristics of the Affected Community:** The West End is Providence's largest neighborhood and is located in the southwestern quadrant of the city. The neighborhood is characterized by mixed industrial and residential use, as well as legacy contamination from industries active in the past. The neighborhood has a long history of childhood lead poisoning, and a significant number of residents living at or below the poverty line (average 36% poverty rate among three separate census tracts according to WEHDC). **Neighborhood Demographics:** The West End is primarily Latino with 57% of residents identifying as Latino or Hispanic (source: WEHDC). The West End also has a large African immigrant and refugee population, as well as Southeast Asian population – 13% of residents identify as Black, non-Hispanic, and 11% of residents identify as Asian, non-Hispanic (WEHDC). About 39% of neighborhood residents were born outside of the US, as of 2010, and 66% of residents report speaking a language other than English at home (WEHDC). Parts of the West End, over the past decade or more, have also attracted many young professionals, largely, though not exclusively, White, raising concerns about gentrification. Cranston and Messer Sts. serve as informal boundaries between higher income and lower income parts of the neighborhood. **West End Community History:** The West End, particularly the Bucklin and Dexter St. area that will be the main focus of our project (between Cranston St. and Elmwood Ave.), continues to have some active light industry alongside homes, two elementary schools, a middle school, and a charter high school. This area of the West End is also home to a former Superfund site, Rau Fasteners, that has been redeveloped by WEHDC into mixed-income housing. WEHDC is a major change agent in the neighborhood, helping launch Friends of Bucklin Park along with residents, supporting the creation of community gardens and a future farm and indoor food and crafts world market called *Sankofa* in partnership with the African Alliance. GWP worked with WEHDC to develop the 4,500 square foot Hope Tree Nursery on a remediated brownfield, that will soon stand at the center of new affordable housing units being built by WEHDC in 2015. **Disproportionate Environmental/Health Impacts on Community:** Environmental health problems affecting urban communities, particularly low-income people of color, are well-documented. Low-income populations and people of color in RI suffer a disproportionate health and environmental burden due to their concentration in urban areas where air quality is worse, access to healthy foods is more limited, there is less green space and tree cover, and houses are older and often not well maintained. Health indicators, ranging from asthma to obesity to lead poisoning, show significant race and income-based disparities that reflect the differing environmental conditions impacting urban areas. RI HEALTH's Office of Minority Health reports that 98% of Hispanics and almost 99% of African Americans in the state live in cities. These populations will therefore be disproportionately impacted by the main urban climate change impacts of 1) heat islands and 2) severe storms and flooding. Elderly people and children are particularly vulnerable. Our project will address this concern through community conversations and education, as well as by building on efforts led by the RI AARP to address walkability and street/sidewalk safety for elderly residents living in the West End. Air pollution is an additional environmental justice concern for RI's core urban areas. African-American children are 3-4 times more likely to be hospitalized for asthma as white children and Hispanic children are twice as likely (Kids Count). The 2007 RI Air Quality Summary Report prepared by the RI Department of Environmental Management (DEM) reports that Providence had the highest levels of PM-10 particulate matter recorded in the state, and PM 2.5 levels are significantly higher than in non-urban areas. Lack of green space, prevalence of vacant lots, and minimal tree cover in lower-income neighborhoods, contribute to air quality concerns. A 2008 RI Public Health Institute environmental assessment of South Providence, an area that includes the West End neighborhood, found that 14% of land in South Providence is vacant lots or abandoned buildings, only 4% is designated green space, and 2% is parks with exercise opportunities or playgrounds. Without significant effort, urban neighborhoods like the West End will bear a disproportionate brunt of climate change-related impacts. **Benefits of Project Results for the Affected Community:** GWP sees a strong desire among community residents and partner organizations in the West End to work towards the goals of our project. In particular, residents have expressed a strong desire to *see* real changes in the neighborhood, after many years of being involved in assessments and planning processes (as gleaned through informal conversations with project partners). GWP's E.D. has been involved in a recent neighborhood assessment process led by WEHDC in partnership with LISC (Local Initiative Support Corporation) to identify neighborhood assets, challenges, and opportunities, and develop a final "community contract" outlining key strategies for implementing the results of the assessment. The process included interviews of 100 leaders, residents, and other stakeholders in the neighborhood, and resulted in identifying both "greening" the neighborhood and

reducing “neighborhood disorganization” as top priorities - two goals that our project will directly address - thus providing tangible, visible benefits to the community. Neighborhood “disorganization” is described as the prevalence of vacant lots, litter on the streets, and the lack of community cohesion, both social and aesthetic. In terms of “greening” the neighborhood, one of the five identified strategies in the West End’s final Community Contract was, “Health and Environment: West End residents will enjoy a healthy and attractive neighborhood of trees, beautiful parks and recreation spaces, and clean streets.” Two specific objectives under this strategy are: 1) “Clean up” and “green up” the West End and 2) Transform Bucklin Park into the “Central Park of the West End”. There is also strong interest in providing job and job training opportunities for residents, which GWP addresses via GroundCorp and our adult environmental job training programs. A last benefit for the community, and a strategy built into the very structure of our project, is providing an opportunity for residents to identify their own solutions to climate change impacts through existing structures and neighborhood institutions that regularly engage residents in decision-making processes, such as WEHDC’s Resident Action Committee meetings, and the Friends of Bucklin Park events and activities. Our project builds on these and other assets, including local schools and libraries, and is being led by groups with strong track records of making the necessary efforts to ensure residents are informed, active leaders in their own community’s evolution.

### **III. Organization’s Historical Connection to the Affected Community**

**Our Involvement in the West End Addressing Health and Environmental Issues:** GWP has been involved in the West End neighborhood for many years. Many of our job training program participants have lived in the West End, and we hold classes in the neighborhood on Cranston St. at the Providence Housing Authority’s Education and Training Center located at Coddington Court, a public housing development. GWP has partnered with WEHDC for many years as well - particularly via GroundCorp, providing landscaping services for WEHDC’s newly-renovated office building, performing vacant lot cleanup and maintenance, and building community gardens that they run through their youth and resident programming. GWP also collaborated with WEHDC to build our Hope Tree Nursery, which was created to provide locally-grown trees to be planted along streets and sidewalks, at private residences and commercial properties, as well as in parks and other public spaces across the city. As part of our project, we will connect our educational efforts with the tree nursery so that schoolchildren and other neighborhood residents can learn about basic tree care and maintenance, different varieties of native and other species that work well in the urban environment, and the importance of trees in fostering neighborhood resiliency. **Working with West End Residents:** GWP’s mission is to strengthen and sustain healthier and more resilient urban communities in RI. Our main strategy is to engage residents and other partners located in environmental justice communities through on-the-ground environmental projects and education that meet people where they are and address fundamental aspects of their daily lives (employment, health, their kids, etc.). We work alongside residents, businesses, and other partners to achieve our goals, and seek out collaboration in all aspects of our work. The West End represents a priority community for GWP because it is a community of color representative of Providence’s diverse population; it is a majority low-income community; it is a neighborhood with a long industrial history; and it is a neighborhood with few environmental assets, aside from the ones fought for by the strong community networks and people in both neighborhoods who care about seeing their communities thrive. All of these elements have led GWP to seek out partners in this neighborhood and create opportunities to work closely together on projects that will benefit not only the West End, but also the city as a whole. GWP’s current E.D., Amelia Rose, who took over the position in July 2014, was formerly the Director of the Environmental Justice League of RI (EJLRI) and will be the lead coordinator for this climate resiliency project. Many of the projects, strategies, and relationships Amelia developed at EJLRI have seamlessly followed her through this transition (read more below in Program Manager Qualifications), including a focus on resident engagement and decision-making as a top priority, engaging residents through hands-on projects that show a direct and visible improvement in their community, and working with strong partners to ensure the success of the project overall. **Resident Decision-Making:** West End residents are engaged in a variety of community processes that ensure their seat at the table and a voice in decision-making, which will continue in our project. Key partners, WEHDC and Friends of Bucklin Park, both have structures in place that regularly bring residents together to discuss, identify, and implement neighborhood-based solutions. WEHDC has a Resident Action Committee and Friends of Bucklin Park is entirely volunteer-run and led by local residents. As illustrated through WEHDC’s contracting of GWP’s GroundCorp landscaping services, our project partners have a strong interest in supporting community-based efforts that offer job and training opportunities to local residents as

well. This, combined with GWP staff's commitment to, past experience with, and track record of resident leadership development, will ensure that residents are actively involved in decision-making for this project.

**Developing Community Capacity:** GWP increases the capacity of community members to address local environmental and public health issues primarily through trainings and education. Our adult job training programs prepare unemployed individuals who face barriers to employment due to former incarceration, economic difficulty, or lack of formal education, for jobs in the environmental sector, including entry-level positions in environmental cleanup, lead and asbestos abatement, and urban landscaping and stormwater management. GWP's summertime Green Team high school youth job program develops the capacity of high-schoolers from Providence neighborhoods to better understand environmental health issues and their connection with environmental justice, and provides youth with an opportunity to give back to their own community through service projects such as community garden maintenance, organizing litter pick-ups, park cleanups, invasive species removal, and other environmental, food, and conservation-related projects. GWP also builds the capacity of community members through on-the-ground demonstration projects such as green infrastructure installation, pavement removal, and tree planting events, where residents are encouraged to participate, ask questions, and learn how they could perform these types of projects on their own or in partnership with GWP. Our Hope Tree Nursery and Ring Street Community Garden also provide opportunities for residents to participate in workshops on tree care, tree species identification, the importance of tree cover in the urban environment, gardening, bee-keeping, composting, and other aspects of sustainability. Lastly, GWP's E.D. also has a great deal of experience responding to requests for assistance when residents have identified a particular environmental health concern impacting their community, and reaching out to residents to educate them about environmental conditions they may not be aware of and/or inform them of an urgent environmental health risk close by. GWP, under this new leadership, will continue to provide this kind of direct assistance to community members, particularly around brownfield remediation. Related capacity-building activities include connecting residents with technical assistance programs provided by the EPA, helping them identify other sources of assistance from local environmental consultants, lawyers, or staff at RI DEM and HEALTH, and ensuring they know who the responsible parties are and/or what the source is of a particular environmental hazard. **Sustaining Our Relationship:** As evidenced by the continued collaborations between GWP and West End organizations and residents over the past few years, our relationship will only strengthen and grow. GWP literally has its roots planted in the West End through the Hope Tree Nursery, and there is much more that can be accomplished in the neighborhood that takes advantage of this incredible asset. In addition, since our project is building off past efforts to engage many of these same community groups to understand climate change-related vulnerabilities and resiliencies of RI's urban communities and identify strategies to address them, we are continuing a conversation and relationship that has already begun - but this time going deeper with greater financial resources. As part of that past project, ECRI produced a final report that was submitted to the state's Climate Change Commission on why it is important to prioritize urban communities, particularly lower-income communities of color, in all future climate change discussions and resiliency planning, as well as disaster response planning. GWP's proposed project, "Community Collaboration for a Resilient West End", is a key outgrowth of these previous efforts and is evidence of our great interest and motivation to maintain and sustain meaningful, ongoing relationships in the West End.

#### **IV. Project Description**

**(i) Our Overarching Goal and Methodology:** In order to model how an environmental justice community in RI, such as the West End, can address the current and future impacts of climate change and increase its resiliency, GWP will convene community partners to increase the capacity of residents to foresee and prepare for climate change-related threats impacting their communities. Our project defines resiliency as the ability for communities to respond to climate-related changes and their impacts, while continuing to function and prosper. In order to do so, communities must work together to respond to weather-related disasters such as severe flooding or heatwaves, protect people, and help the entire community recover afterwards. But more importantly, communities must work proactively ahead of time, to create conditions that will minimize negative impacts, make them less devastating, and develop plans to foresee and deal with challenging, even unpredictable conditions in the future. One of the most important ways this kind of community resiliency can be achieved is by, first, uniting community members around a common purpose by strengthening their personal relationships with each other, providing space for mutual education, and demonstrating achievable, impactful solutions through visible and effective demonstration projects. These projects will also serve a functional role to reduce the negative impacts of flooding and heatwaves,

including on air and water quality, and show a strong connection to improving the economic well-being of the neighborhood and its residents through employment opportunities showcased by our landscaping social venture, GroundCorp. Together, this will constitute the underlying methodology of our project.

**Community Activities to Build Capacity:** Our project will increase the capacity of West End residents to prepare for climate-related changes in productive and rejuvenating ways, by providing creative educational opportunities for individual community members and groups of residents such as schoolchildren and resident action committees to learn about what climate change impacts they can expect in their neighborhoods, as well as demonstrating resiliency strategies including the installation of green infrastructure and the planting of trees to address heat island and flooding impacts through our social venture, GroundCorp. Our team will assist residents in conducting a neighborhood-wide assessment to identify and map areas in the West End where multiple climate resiliency benefits can be gained via trees and other green infrastructure interventions. This assessment will draw on residents' own knowledge of their neighborhood - not only where there are fewer trees and frequent flooding, but also where the difficult or dangerous intersections are located, where there are established or informal pedestrian routes that could be improved, areas that would benefit from beautification, where wildlife habitat might be restored, where social gathering spaces could be created or improved, where diesel trucks idle, as well as where vulnerable residents live. Residents will identify these types of neighborhood features, and we will overlay their data with data from the City of Providence (who will be partnering with the Climate Smart Cities program in 2015), Brown University, RI DEM, HEALTH, and other partners to create a comprehensive vulnerability/resiliency assessment, which we will report back to the public later in the project period. From the assessment, we will also select one highly-visible area of the neighborhood for a Green Block demonstration site, engaging multiple homeowners, small businesses, or other properties to showcase a variety of green infrastructure strategies that would address identified neighborhood concerns and provide multiple benefits. The assessment will also allow our team to identify areas where added tree cover is needed most and would provide the most benefit. Our project will explicitly focus on supporting lower-income people and people of color in order to address the disproportionate impact urban climate change impacts will have on these populations; and will serve as a model that can be replicated and built upon to increase resiliency across the city and region.

**Specific Activities and their Relation to Environmental Statutes:** In the West End, lack of tree cover and green space, as well as poor air quality, are well-known concerns, while flooding and stormwater control is a less visible issue to the ordinary community resident. GWP and our partners understand these two issues as the main urban climate change vulnerabilities in Providence in addition to relating to two qualified EPA environmental statutes that are the focus of this grant program: 1) Clean Water Act 104(b)(3), and 2) Clean Air Act Section 103(b)(3). Using heat/air quality and flooding/water quality as a starting point will allow us to engage residents in meaningful and focused education, training, and other activities while still leaving open our ability to address additional concerns that may surface through the collaborative process (such as developing responses to emergency events, assisting elderly residents, improving neighborhood aesthetics, walkability, etc.). Decreasing impervious surfaces, planting trees in tree wells that also capture stormwater, pruning existing trees, and installing other green infrastructure will strengthen the neighborhood's resilience to climate change-related impacts including flooding and the urban heat island effect, and will produce additional side benefits such as beautifying the neighborhood and addressing stormwater pollution in urban waterways. Examples of the types of green infrastructure we will explore include de-paving a portion of a residential driveway and replacing it with pervious materials that absorb roof and driveway runoff; working with the City's Department of Public Works to gain permission to de-pave the right-of-way strip between a city sidewalk and street and re-plant the area with trees and/or native plants; re-directing a residential or commercial downspout into a grassy or planted area, and/or rain barrel; and comprehensive tree plantings on both public and private property in collaboration with the Providence City Forester. GWP will build from past experience installing small/mid-scale green infrastructure projects in the Reservoir Triangle neighborhood as well as connecting homeowners and businesses with our tree nursery to get more trees planted in low-canopy neighborhoods. Each individual project will build towards a Green Block demonstration area on one street or block in order to show how, together, small improvements can add up to achieve significant resiliency outcomes. The tree planting/s may coincide with the Green Block and/or focus on other priority areas in the neighborhood. Throughout the project, GWP will make good use of the Hope Tree Nursery as well as Bucklin Park as community gathering spaces and education/training sites to learn about how green space, trees, and other neighborhood assets contribute to its overall resiliency. Near the end of the project, all partners will work together to develop a plan for the maintenance and upkeep of the trees that were



planted as well as the green infrastructure installations. Maintenance will likely be performed by GroundCorp in the future, with additional support from volunteers recruited through our partners during the project period. We also expect to establish stronger relationships with the four schools located in the West End through this project, and will look towards establishing more volunteer opportunities for their students in the years to come, especially around basic tree care for young and recently planted trees.

**The project will start October 1, 2015 and end September 30, 2016, with the following activities:**

<b>Date</b>	<b>Major Activities</b>
October 2015	Project begins, partners are convened to review project goals, timeline, discuss planning and strategies, as well as new opportunities that may have arisen since writing proposal (including opportunities to interface with policy-making and implementation efforts related to climate resiliency like RI's Executive Climate Change Coordinating Council (EC4), the stormwater utility feasibility study, and the Climate Smart Cities mapping program).
	Neighborhood assessment begins; door-to-door outreach begins; residents engaged in neighborhood walks to identify areas prone to flooding, hot temperatures, or otherwise needing intervention; maps created to document data collected of assets/vulnerabilities.
November 2015	Assessment and outreach continue; Participating artists identified and brought in to meet with partners.
December 2015-February 2016	Planning conducted based on neighborhood assessments and other collected data to determine sites for beneficial green infrastructure, trees, and other resiliency interventions; partners determine priority interventions based on data. Candidate street or block for comprehensive installation of green infrastructure (Green Block) identified as well as locations where trees are needed. Work with artists and community groups to visualize the future transformed areas.
	Educational workshops for residents and partners held over the winter on climate change related topics, movie screenings, etc.
March 2016	Public event held in Bucklin Park to announce priority interventions for neighborhood, featuring speakers, music, food, games and activities for kids, information about climate change; Maps and Neighborhood Assessment Data publicly released; Visual representations of the future transformed area (Green Block) and tree plantings showcased, as well as full map of other neighborhood locations where vulnerabilities exist to allow for planning of future interventions.
	Project progress report submitted to EPA.
March-May 2016	Artist-led educational efforts conducted at one community-based organization or school, connected with tree nursery, culminating in participation in 2016 Urban Pond Procession.
April-June 2016	West End Green Block completed by GroundCorp; learning opportunity for residents on green infrastructure techniques/materials/equipment. Educational signage installed.
May 2016	Urban Pond Procession featuring climate change resiliency-related art created by project participants; will include West End neighborhood on procession route.
June-July 2016	Tree planting/s held in the neighborhood along with related activities, including providing basic care/pruning/upkeep for existing trees in coordination with Providence City Forester.
August 2016	Summer celebratory event and public release of final Community Report on Climate Change Vulnerabilities and Resiliency in the West End. Partners plan for continued work together. Maintenance plans for demonstration projects and planted trees developed.
September 2016	Project evaluation completed. Final report submitted to EPA.

**(ii) Description of Partners and Their Role in the Project:** All of the project partners listed below work together quite often and collaborate on many grant-funded and other programs. Even after this specific project ends, GWP will continue pursuing opportunities to partner with each of these entities to further both climate resiliency and other urban environmental goals. Partners that will be convened through this project include:

- **Friends of Bucklin Park** - a network of volunteer residents in the West End whose mission is to provide a safe and environmentally friendly park space in order to promote active lifestyles for children in the community; also participated in the previous ECRI-led climate resiliency project, hosting community conversations and tree plantings. They will participate in a similar capacity for this

project - connecting our project with residents interested in hosting green infrastructure demonstrations at their homes or businesses, and assist with tree planting. Contact: Angie Ankoma

- **West Elmwood Housing Development Corporation (WEHDC)** - a community development corporation and the second top producer of affordable housing units in Providence (in 2005-2009). WEHDC will connect our project with community members and residents of their housing developments, via their resident action committee as well as help us identify demonstration sites, where to implement our Green Block intervention, and where to plant trees. Contact: Rachel Newman-Greene
- **African Alliance of RI** - a non-profit dedicated to improving the lives of Africans living in RI. African immigrants and refugees from 40 African countries currently live in RI; the West End is a primary resettlement neighborhood in Providence. AARI has helped refugees start their own gardens and agricultural enterprises, and is a key partner in developing *Sankofa* with WEHDC. AARI also participated in ECRI's previous climate resiliency project. AARI will connect us with the refugee community, who also face language and other cultural and socio-economic barriers. AARI will assist in community outreach and engagement activities. Contact: Julius Kolawole
- **Environment Council of Rhode Island (ECRI)** - a coalition of over 60 RI organizations and individuals who serve as an effective voice for developing and advocating policies and laws that protect and enhance the environment; and **Clean Water** - a national nonprofit research and educational organization, with locally staffed environmental and health protection programs serving communities in over 20 states. Clean Water provides leadership for the ECRI Green Infrastructure Coalition and will use its canvass to build statewide support for funding and policies that support resilience efforts in the urban communities such as the West End. Clean Water is also building a database of existing green infrastructure projects that will be used to establish a broad vision and priorities for new project implementation. Contact: Meg Kerr
- **UPP Arts** (formerly Urban Pond Procession) - a revolving group of volunteer artists, scientists, educators, and concerned citizens interested in collaborating to promote the health of Providence's urban ponds. UPP Arts will connect our project with artists who will assist in developing educational workshops as well as creative strategies to engage community residents in non-typical outreach methods. Contact: Holly Ewald
- **Brown University's Climate Change and Environmental Justice in RI TRI-Lab** - a new initiative bringing together students, faculty, and community practitioners to engage with a complex social issue and collaboratively develop, refine and test solutions to the issue. The new Lab for spring 2015 through fall 2015 will focus on Climate Change and Environmental Justice (CCEJ) in RI. The TRI-Lab's focus neighborhood aligns with the focus neighborhood of our project in the West End and we will build off their efforts and research as a major component of our project. The ultimate goal of the CCEJ Lab is to reduce the climate change-related public health risks to individuals in targeted communities, and increase the capacities of these communities to respond to climate change threats. Contact: Allen Hance
- **RI Department of Health (HEALTH) Climate Change Program** - looks at climate change and its impact on public health, paying particular attention to elderly Rhode Islanders and other vulnerable populations. Our project will leverage HEALTH's resources to assist with research, data, monitoring of outcomes and evaluations of the project, as well as other technical assistance and expertise on climate change-related impacts facing RI. Contact: Julia Gold
- **RI Department of Environmental Management (DEM) Office of Water Resources** - will serve as an invaluable advisor to our climate resiliency project, providing technical expertise and advice on the neighborhood assessments, installations of green infrastructure retrofits, and monitoring and measuring impacts of our green infrastructure demonstration projects. Contact: Elizabeth Scott
- **City of Providence Office of Sustainability** - will serve as an advisor and liaison with local officials, including at the City's Department of Public Works, as well as assist in identifying suitable locations for the Green Block intervention. The office will also help document our project for use as a model for other city and state-wide initiatives. Contact: Sheila Dormody

**V. Organizational Capacity and Programmatic Capability:** GWP has a strong level of organizational capacity with an energetic new Executive Director (E.D.), who formerly ran the Environmental Justice League of RI for six years. Current staff have a strong track record of achieving the goals of all of the projects we pursue. GWP has been working in environmental justice communities in the greater Providence



area for over 30 years and has been providing environmental job training to residents, particularly unemployed individuals, low-income people, people of color, veterans, and the formerly-incarcerated for over 15 years. **Current Programs:** **Adult Environmental Job Training:** GWP serves as a key environmental job training provider in the state focusing on preparing individuals who face barriers to employment for entry-level positions in brownfield remediation, asbestos and lead abatement, and stormwater management. **GroundCorp Landscaping Social Venture:** GWP employs job training graduates who perform urban land restoration work including landscaping, green infrastructure, maintenance, and vacant lot cleanup. GroundCorp oversees our Hope Tree Nursery and Ring St. Community Garden. **Summer Youth Green Team:** High school age youth are hired for paid positions to participate in environmental education and community service projects in their neighborhood, developing their understanding of environmental issues and interest in environmental stewardship. **Assistance to Residents, Businesses, and Government:** GWP performs community-wide education on a variety of topics (recycling, brownfield remediation, etc.) often at the request of municipal government, a partner non-profit, or another entity. We support residents and businesses who need assistance with tree planting, native plant landscaping, and soil remediation. We act as connector and convener when community members request assistance understanding technical information related to brownfield redevelopment, or their rights vis a vis a polluting entity near their homes. **Organizational Capacity:** GWP's E.D. communicates regularly with EPA program officers, and conducts all financial and programmatic reporting in a timely manner. Based on our prior experience, our strong partnerships, and the clear goals set forth in this proposal, we are confident in our capacity to successfully achieve the proposed project's goals. Our staff are supported by an active 8-member Board of Directors. Board members play integral roles in the organization, including fundraising, financial planning and oversight, project support, program planning, and evaluation. GWP relies on a well-respected accounting firm to manage day-to-day finances and ensure that federal grants are managed and reported on appropriately. The E.D. has regular meetings with the bookkeeper, who provides the organization monthly reports, which are shared with the Board of Directors at bimonthly meetings. GWP has managed many federal grants since its inception, most recently EPA's Environmental Workforce Development and Job Training grant, (Kathy Castagna; JT96169201) and our new E.D. has a solid history of excellent grant management, having personally overseen the implementation of an EPA CARE grant (Sandy Brownell; RE971928010), EPA EJ Small grant (Sandy Brownell; EQ961267010), and EPA Urban Waters grant (Rob Adler; UW961584010) in the past. GWP embraces a collaborative process when undertaking project activities but we closely monitor expenses to ensure the grant funds are used properly. GWP's E.D. will use her knowledge and expertise to ensure timely completion of the proposed project and communicate any anticipated issues with the EPA Project Officer as needed. GWP will ensure the awarded grant funds are expended in a timely and efficient manner through the following controls: 1) project manager will maintain timesheets to document hours spent on the funded project and monitor the participation of partners and other participants via sign-in sheets and one-on-one check-ins; 2) routine meetings will be conducted with our bookkeeper to monitor grant spending and grant balances; 3) the grant cost center will be updated by bookkeeper on a monthly basis and shared with GWP staff and board; 4) project manager will meet regularly with partners to review project timeline, objectives, and deliverables to ensure that benchmarks are attained within the appropriate timeframes; and 4) project progress and financial reports will be filed according to EPA expectations.

**VI. Qualifications of the Program Manager:** Amelia Rose, GWP's new Executive Director, will serve as the Program Manager for the proposed project. Amelia worked for six years as the Director, then Co-Director, of the Environmental Justice League of RI. She was hired in July 2014 to lead GWP. Amelia has over a decade of community organizing and policy experience and is bilingual in Spanish/English. She was the primary staff at EJLRI providing assistance to community groups including at the Gorham brownfield site/Mashapaug Pond, the Tidewater brownfield site, Johnston's Dyerville neighborhood next to an active scrap metal shredding facility, and others. She continues the role of assisting these community groups at GWP because of the institutional knowledge and relationships she has developed. Due to her leadership on urban environmental initiatives, she has become a sought-after voice on issues ranging from brownfields cleanup and public involvement, stormwater and green infrastructure, recycling and solid waste, and other issues related to EJ and sustainability. At EJLRI, Amelia led the EPA CARE Alliance project to determine priority toxic issues facing Providence residents, organized residents in the Reservoir Triangle neighborhood around the cleanup of the Gorham Silver brownfield site, developed partnerships with numerous organizations including UPP Arts, GWP, Alvarez High School, and others to begin addressing

stormwater impacts on Mashapaug Pond, worked alongside high school youth to launch food and nutrition-related projects along with West Elmwood Housing and the African Alliance, and has served as the Chair of the Providence Environmental Sustainability Task Force for three years, working closely with the City's Office of Sustainability. Amelia's strengths include facilitation of partnerships and bringing many organizations together to achieve common goals. Her experience and relationships provide tremendous background knowledge and connections with partners and community members that will ensure the successful implementation of "Community Collaboration for a Resilient West End".

**VII. Past Performance in Reporting on Outputs and Outcomes:** GWP has received multiple EPA grants for over two decades. Starting in 2002 we received the EPA Brownfields Job Training and Development Demonstration Pilot grant. Then in 2004, a second EPA Brownfields Job Training grant was awarded to GWP, this time focusing on the city of Pawtucket. GWP successfully met the requirements for both grants. All funds were drawn down and expended in a timely manner. All quarterly and annual reporting was completed in a timely and comprehensive manner. The following is a list of our most recent EPA-funded projects that have taken place within the past five years, with the most recent grant listed first:

1. U.S. EPA Environmental Workforce and Job Training Cooperative Agreement: JT-96169201

**Grant Awarded:** July 2012 **Grant Award Amount:** \$200,000 over 3 years **EPA P.O.:** Kathy Castagna  
This is an active grant until November 2015. GWP is accomplishing anticipated goals by, so far, graduating 27 individuals from the program, and placing at least half of all graduates from each cycle in related employment. Staff and organizational changes mid-grant were challenging, but have all been addressed. We are looking forward to running a fourth training cycle in spring 2015. We report on our accomplishments through grant reports, conversations with our Project Officer, and via ACRES, the EPA Brownfields online data tracking tool.

2. U.S. EPA Brownfields Job Training Cooperative Agreement: JT-96133201

**Grant Awarded:** April 2010 **Grant Award Amount:** \$200,000 over 2 years **EPA P.O.:** Kathy Castagna  
GWP exceeded expected results of this grant. We committed to four training cycles, enrolling a minimum of 60 individuals in training, 52 of whom would complete the training and receive all certifications. We committed to a 75% employment rate, or 39 graduates finding employment. In the end, 69 were enrolled, 58 graduated, and 44 found employment. Earned-income from the employment of graduates through our GroundCorp landscaping social venture was directed to support an additional fifth training cycle. GWP submitted all quarterly and annual reports, and continually updated ACRES to reflect training outcomes from each cycle and all new hires.

3. U.S. Department of Labor, Employment, and Training Administration WIA Pilot & Demonstration

Earmark Grant: EA-20636-10-60-A-44 **Grant Awarded:** May 2010 **Grant Award Amount:** \$143,000  
**Project Title:** Transitional Jobs in Sustainable Development **P.O.:** Keeva Davis - This training program was funded through an earmark secured for GWP by RI Senator Jack Reed. The curriculum focused on stormwater management and sustainable landscaping in urban environments. 58 individuals graduated from the program over two years and 38 found employment, some with GroundCorp. This training program was supported by funding from the City of Providence and United Way. All reporting was conducted in a timely manner.

**VIII. Quality Assurance Project Plan (QAPP) Information:** GWP's project will involve the use of existing environmental data. We do not anticipate needing to develop a Quality Assurance Project Plan.